

CLAIMS

What is claimed is:

1. A heat alert safety device attachable to hot surfaces including hot metal surfaces, hot glass surfaces and other hot surfaces, for warning individuals that the surface is hot, comprising:
 - a liquid crystal composition,
 - a container for housing the liquid crystal composition, said container being transparent at least in a portion of the container covering the liquid crystal composition and being made of heat conductive material,
 - the liquid crystal composition shaped to convey an outline of the letters "HOT", embedded in a flat face of the container and designed to undergo and maintain a readily perceptible color change whenever the temperature of the hot surface exceeds a specified temperature,
 - an attachment element made of a heat conductive material, said attachment element being attachable to the hot surface in a manner that allows the letters "HOT" to be visible and said attachment element being removable from the hot surface to attach the device to a different hot surface or a different part of the hot surface, the attachment element being able to withstand surface temperatures of at least 300 degrees Fahrenheit.
2. The heat alert safety device of claim 1, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

3. An improvement in a heating element for a top surface of an electric stove made of an electric coil, the improvement comprising:

an insulated serpentine electric coil centered around a central disk having a liquid crystal composition in the shape of the letters "HOT" embedded on a top surface of the disk, said liquid crystal composition designed to undergo and maintain a readily perceptible color change whenever the disk exceeds a specified temperature.

4. The improvement of claim 3, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

5. An improvement in a heating element for a top surface of a gas stove of the type having heating elements situated in recessed area and surrounded by metal grates, the improvement comprising:

a central metal element having a series of gas inlet holes on its side and having a disk on a top surface of said central metal element containing liquid crystals in the form of the letters "HOT" embedded on the disk, said liquid crystal composition designed to undergo and maintain a readily perceptible color change whenever the disk exceeds a specified temperature.

6. The improvement of claim 5, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

7. A heat alert safety device attachable to hot surfaces including hot metal surfaces, hot glass surfaces and other hot surfaces, for warning individuals that the surface is hot, comprising:

- a thermochromic composition,
- a container for housing the thermochromic composition, said container being transparent at least in a portion of the container covering the thermochromic composition and being made of heat conductive material,
- the thermochromic composition embedded in a flat face of the container and designed to undergo and maintain a readily perceptible color change whenever and so long as the temperature of the hot surface exceeds a specified temperature, said color change revealing a predetermined symbol underneath the thermochromic composition, said predetermined symbol shaped to convey an outline of the letters "HOT"
- an attachment element made of a heat conductive material, said attachment element being attachable to the hot surface in a manner that allows the letters "HOT" to be visible and said attachment element being removable from the hot surface to attach the device to a different hot surface or a different part of the hot surface, the attachment element being able to withstand surface temperatures of at least 300 degrees Fahrenheit.

8. The heat alert safety device of claim 7, wherein the thermochromic composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

9. The heat alert safety device of claim 7, wherein when the temperature of the surface

does not exceed the predetermined temperature the thermochromic composition is not readily visible against a background color of the hot surface

10 A heat alert safety device attachable to hot surfaces including hot metal surfaces, hot glass surfaces and other hot surfaces, for warning individuals that the surface is hot, comprising:

a liquid crystal composition,

a container for housing the liquid crystal composition, said container being transparent at least in a portion of the container covering the liquid crystal composition and being made of heat conductive material,

the liquid crystal composition shaped to convey a heat warning symbol, embedded in a flat face of the container and designed to undergo and maintain a readily perceptible color change whenever the temperature of the hot surface exceeds a specified temperature,

an attachment element made of a heat conductive material, said attachment element being attachable to the hot surface in a manner that allows the heat warning symbol to be visible and said attachment element being removable from the hot surface to attach the device to a different hot surface or a different part of the hot surface, the attachment element being able to withstand surface temperatures of at least 300 degrees Fahrenheit.

11. The heat alert safety device of claim 10, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

12. An improvement in a heating element for a top surface of an electric stove made of an electric coil, the improvement comprising:

an insulated serpentine electric coil centered around a central disk having a liquid crystal composition in the shape of a heat warning symbol embedded on a top surface of the disk, said liquid crystal composition designed to undergo and maintain a readily perceptible color change whenever the disk exceeds a specified temperature.

13. The improvement of claim 12, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

14. An improvement in a heating element for a top surface of a gas stove of the type having heating elements situated in recessed area and surrounded by metal grates, the improvement comprising:

a central metal element having a series of gas inlet holes on its side and having a disk on a top surface of said central metal element containing liquid crystals in the form of a heat warning symbol embedded on the disk, said liquid crystal composition designed to undergo and maintain a readily perceptible color change whenever the disk exceeds a specified temperature.

15. The improvement of claim 5, wherein the liquid crystal composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

16. A heat alert safety device attachable to hot surfaces including hot metal surfaces, hot glass surfaces and other hot surfaces, for warning individuals that the surface is hot, comprising:

a thermochromic composition,
a container for housing the thermochromic composition, said container being transparent at least in a portion of the container covering the thermochromic composition and being made of heat conductive material,

the thermochromic composition embedded in a flat face of the container and designed to undergo and maintain a readily perceptible color change whenever and so long as the temperature of the hot surface exceeds a specified temperature, said color change revealing a predetermined heat warning symbol underneath the thermochromic composition,

an attachment element made of a heat conductive material, said attachment element being attachable to the hot surface in a manner that allows the heat warning symbol to be visible and said attachment element being removable from the hot surface to attach the device to a different hot surface or a different part of the hot surface, the attachment element being able to withstand surface temperatures of at least 300 degrees Fahrenheit.

17. The heat alert safety device of claim 16, wherein the thermochromic composition is designed to undergo and maintain a readily perceptible color change whenever the disk exceeds 115 degrees Fahrenheit.

18. The heat alert safety device of claim 16, wherein when the temperature of the surface does not exceed the predetermined temperature the thermochromic composition is not readily

visible against a background color of the hot surface